

CLAIMS

What Is Claimed Is:

1 1. A method of access control in a communication network comprising the steps of:
2 determining a load status of the network between a call originating node and a call
3 terminating node;
4 determining whether the load status permits a specified quality of service; and
5 if the specified quality of service is permitted, establishing a transport connection
6 between the call originating node and the call terminating node.

1 2. A method of access control in a network comprising the steps of:
2 sending a probe packet through the network from a first node to at least one other
3 node;
4 updating a portion of the probe packet at each node based on the load status of the
5 node;
6 determining whether the load status permits a specified quality of service; and
7 if the specified quality of service is permitted, establishing a transport connection
8 between the at least two nodes in the network.

1 3. The method of claim 2, wherein the step of sending a probe packet through the
2 network is performed continuously.

1 4. The method of claim 2, wherein the step of sending a probe packet through the
2 network is performed at pre-determined times.

1 5. The method of claim 2, wherein the step of sending a probe packet through the
2 network is performed in response to a network event.

1 6. The method of claim 2, wherein the step of sending a probe packet is performed for
2 each of a plurality of traffic classes.

1 7. An access control system in a network comprising:
2 at least one load measurement proxy, which probes the network to determine the
3 congestion state of the network;
4 a bandwidth broker server in communication with the at least one load measurement
5 proxy and correlating the determined congestion state information; and
6 a bandwidth broker client in communication with the bandwidth broker server and an
7 application, wherein the bandwidth broker client queries the bandwidth broker server based
8 on requirements of the application.

1 8. The access control system of claim 7, wherein the requirements of the application
2 include at least two node addresses and a quality of service.

1 9. The access control system of claim 7, wherein the requirements of the application
2 include at least one of an application traffic class, a peak bit rate, a packet delay, a delay
3 variation, a packet loss, and a guaranteed bit rate.

1 10. The access control system of claim 7, wherein the load measurement proxy
2 continuously probes the network.

1 11. The access control system of claim 7, wherein the load measurement proxy probes the
2 network at predefined intervals.

1 12. The access control system of claim 7, wherein the load measurement proxy probes the
2 network in response to a network event.

1 13. The access control system of claim 7, wherein the load measurement proxy
2 determines the congestion state of the network for each of a plurality of traffic classes.

1 14. An access control system in a network comprising:
2 at least one load measurement proxy, which probes the network to determine the
3 congestion state of the network;

4 a bandwidth broker server in communication with the at least one load measurement
5 proxy and correlating the determined congestion state information; and
6 a plurality of bandwidth broker clients in communication with the bandwidth broker
7 server and a respective one of a plurality of applications, wherein each of the plurality of
8 bandwidth broker clients queries the bandwidth broker server based on requirements of the
9 respective one of a plurality of applications.